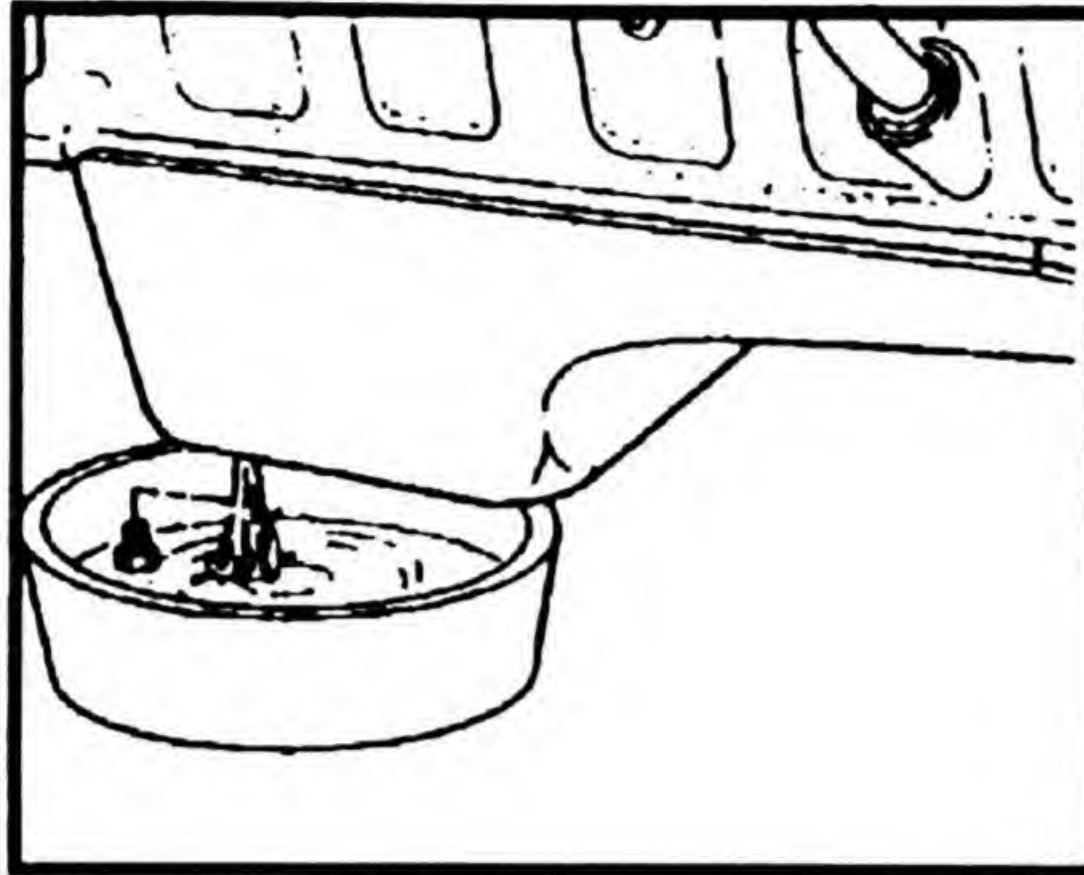


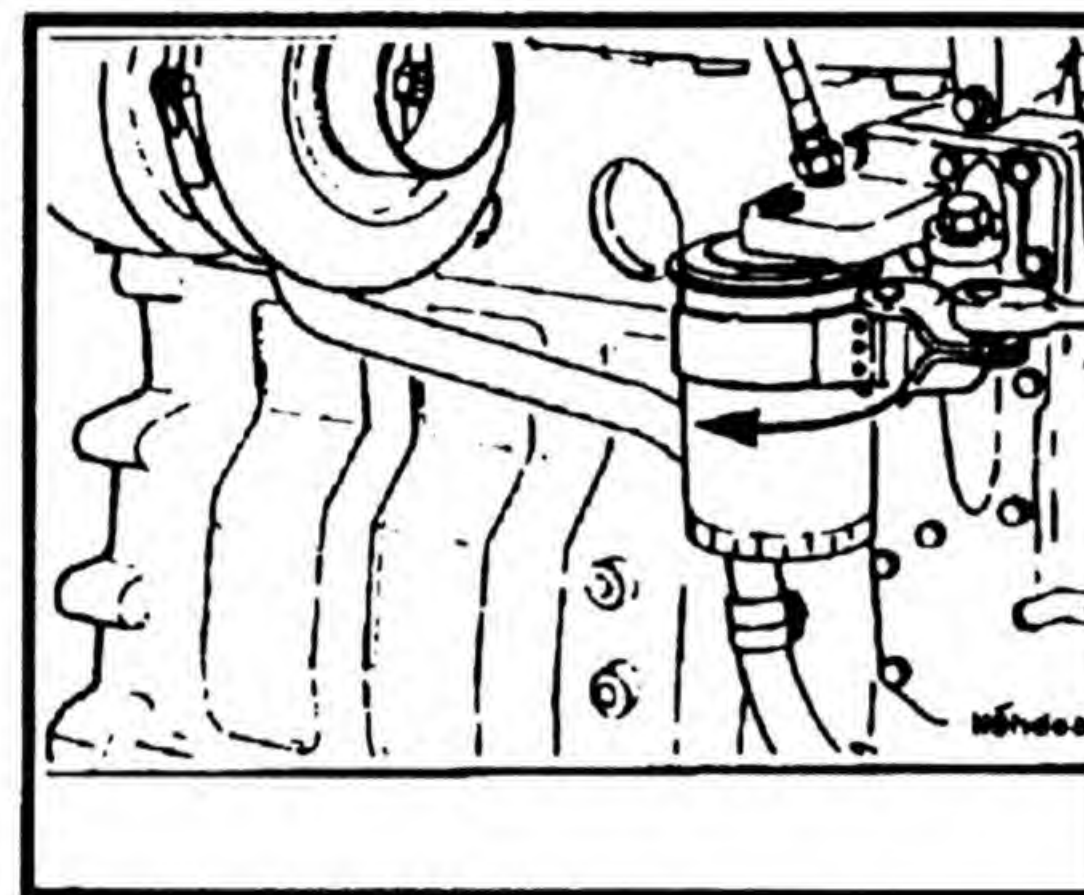


Lubricating Oil and Filter Change-Refer to Operation and Maintenance Manual for mileage change intervals.

Drain old oil in container that can hold at least 20 liters (15 U.S. qts.) of oil. Use 3/8 inch square drive ratchet to remove and install the drain plug.



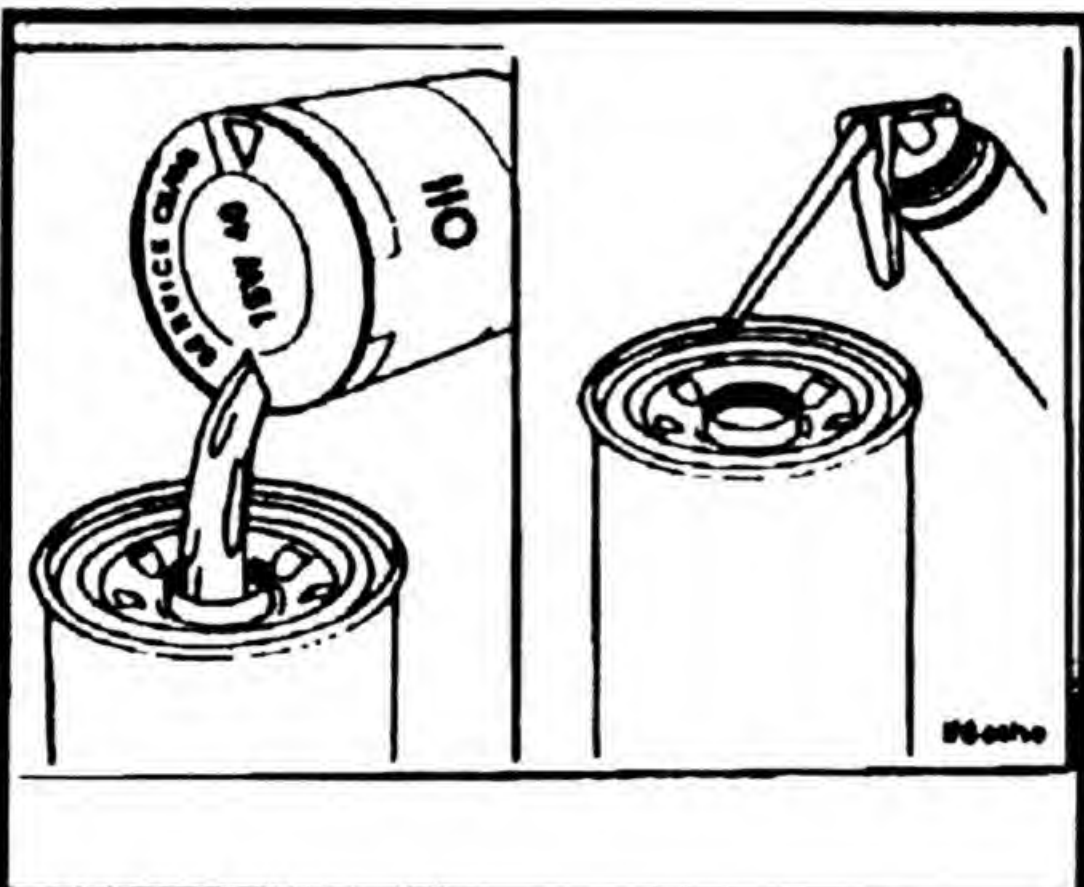
Clean the areas around the oil filter and remove oil filter with the filter wrench. Clean the gasket surface of the filter head.



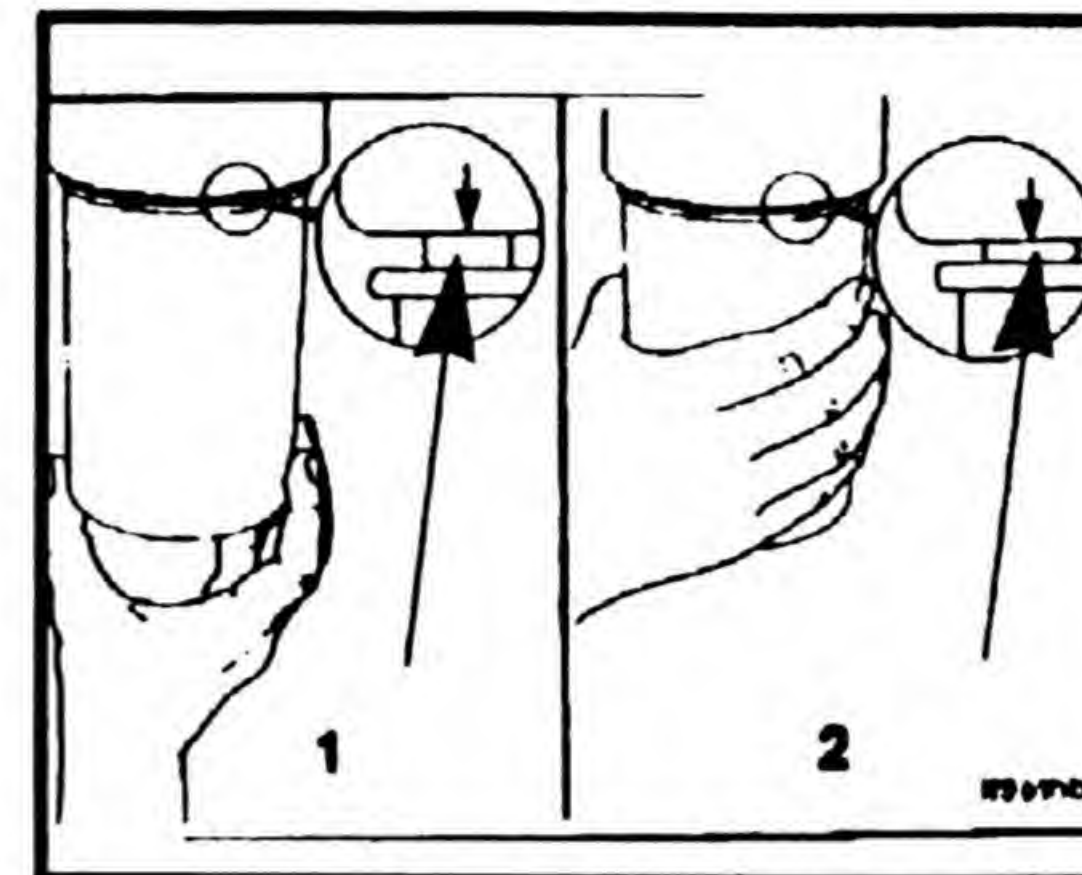
Use the correct oil filter as specified by your Operation and Maintenance Manual..



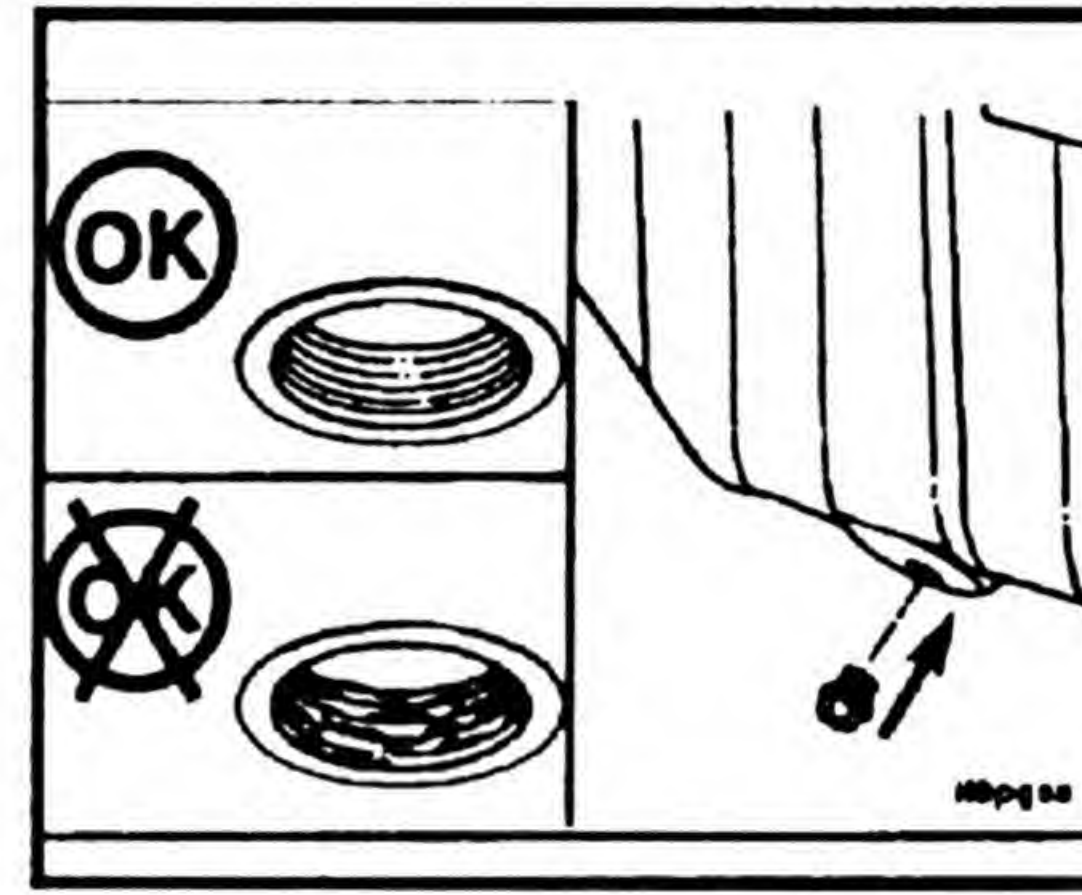
Fill the filter with clean lubricating oil before installation. Apply light film of oil to gasket seal.



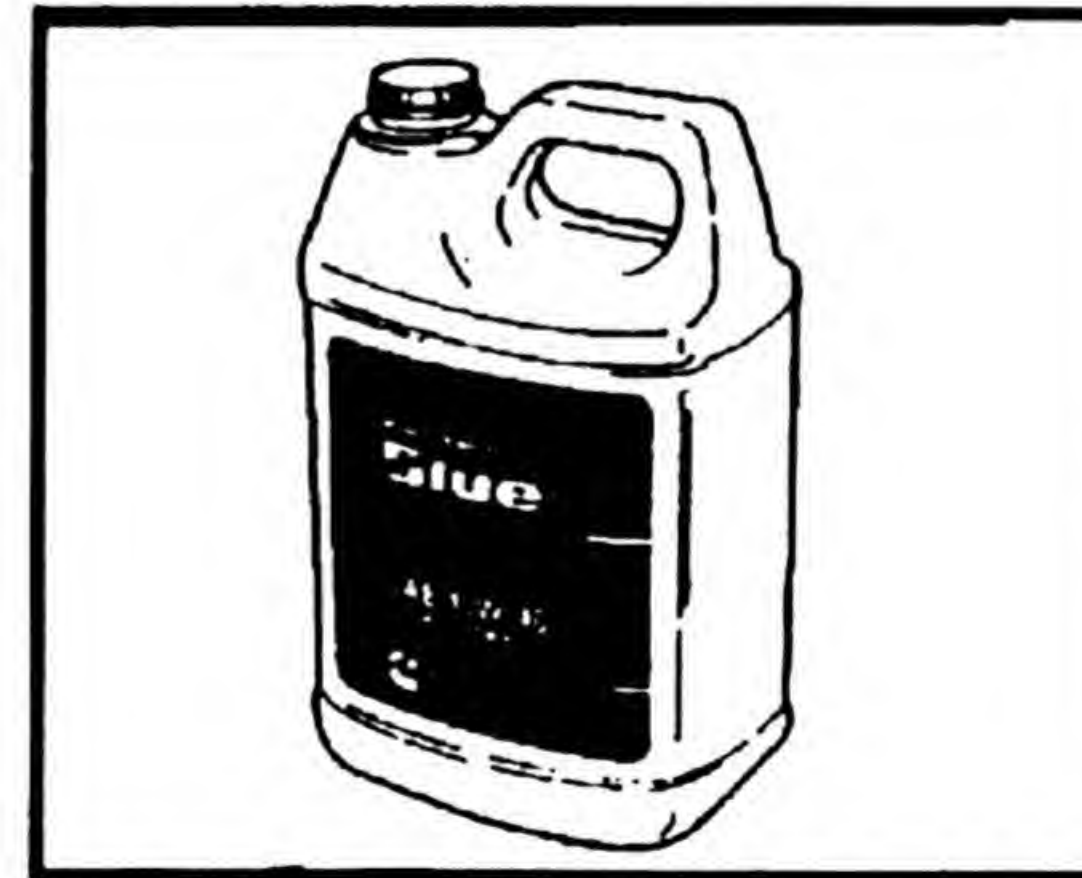
Install the filter as specified by the filter manufacturer. Mechanical over tightening can distort the threads or damage the filter element seal.



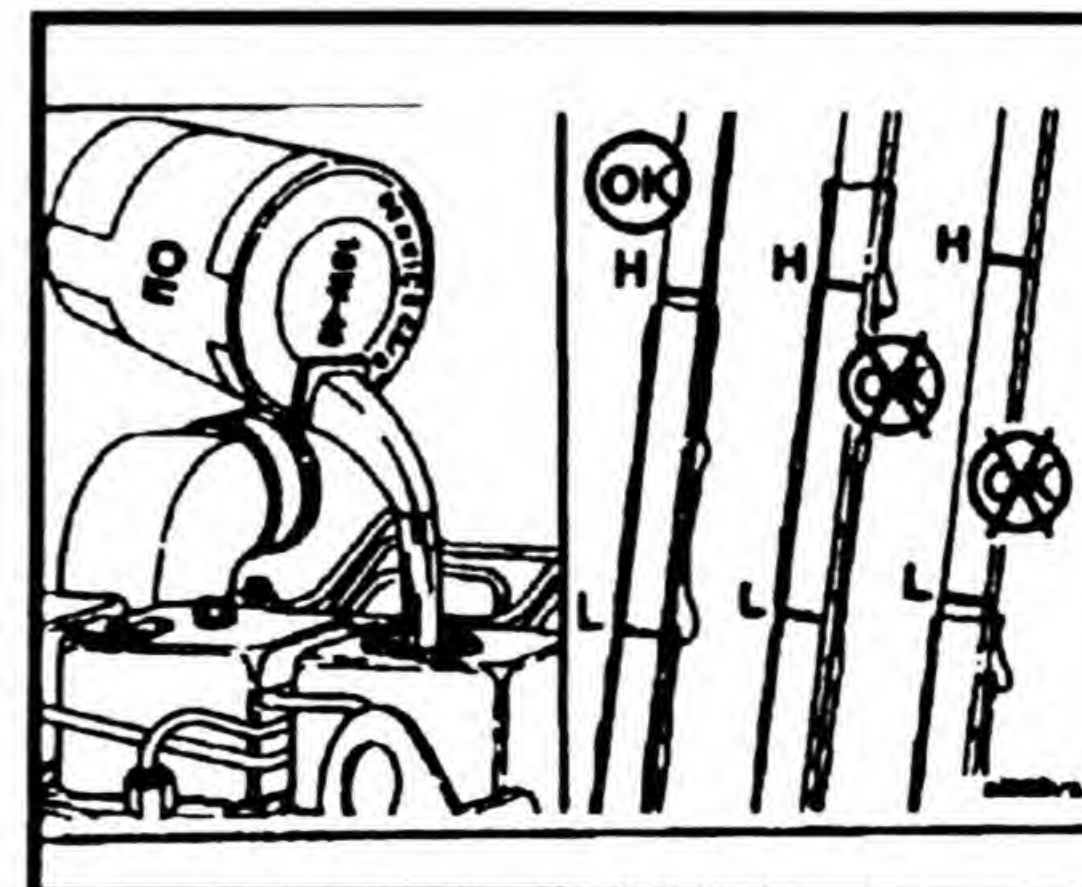
Check and clean the oil drain plug threads and sealing surface. Install the oil drain plug. Tighten to specifications listed in manual.



Fill the engine with clean oil to proper level. Total system capacity: 10.4 Liters (11 U.S. Qts.).

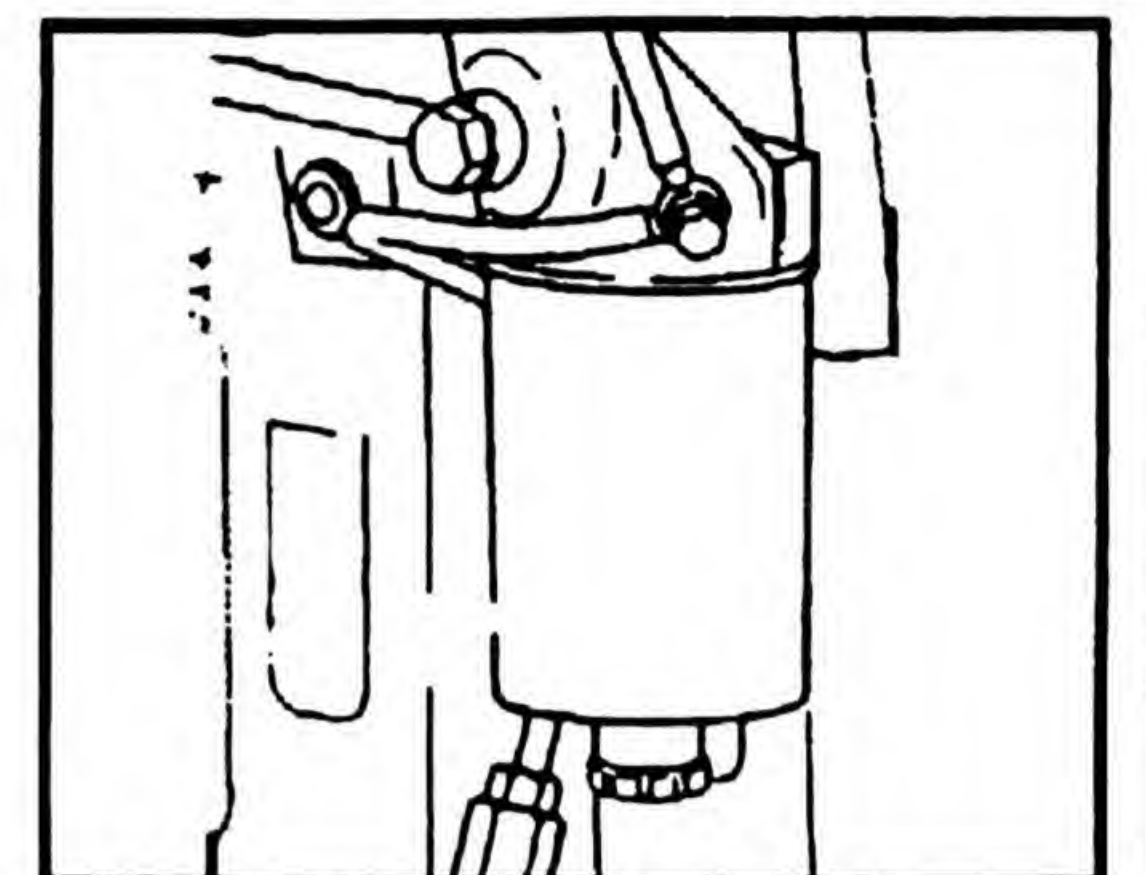


Operate the engine at idle to inspect for leaks at the filter and the drain plug. Stop engine, wait 5 minutes and check oil level on dipstick. Add as required.

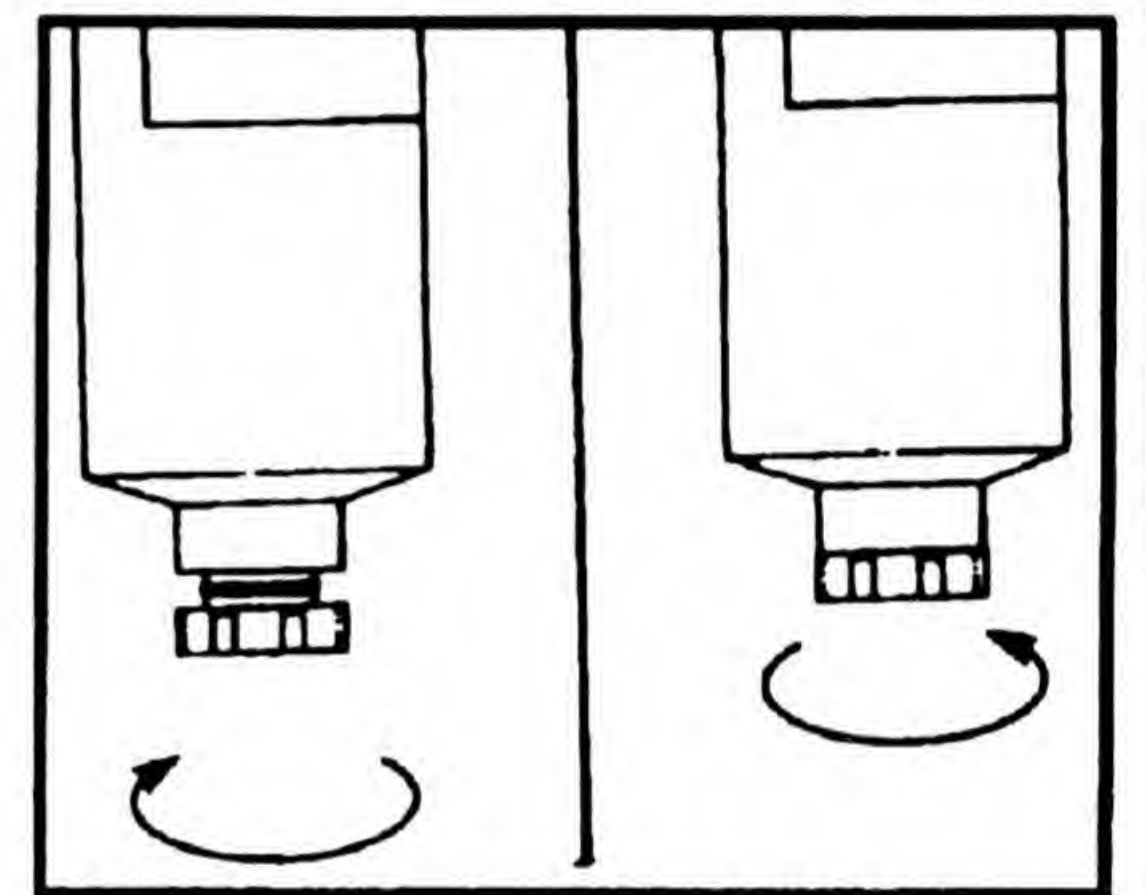


Fuel Filter Change-Refer to Operation and Maintenance Manual for mileage change intervals.

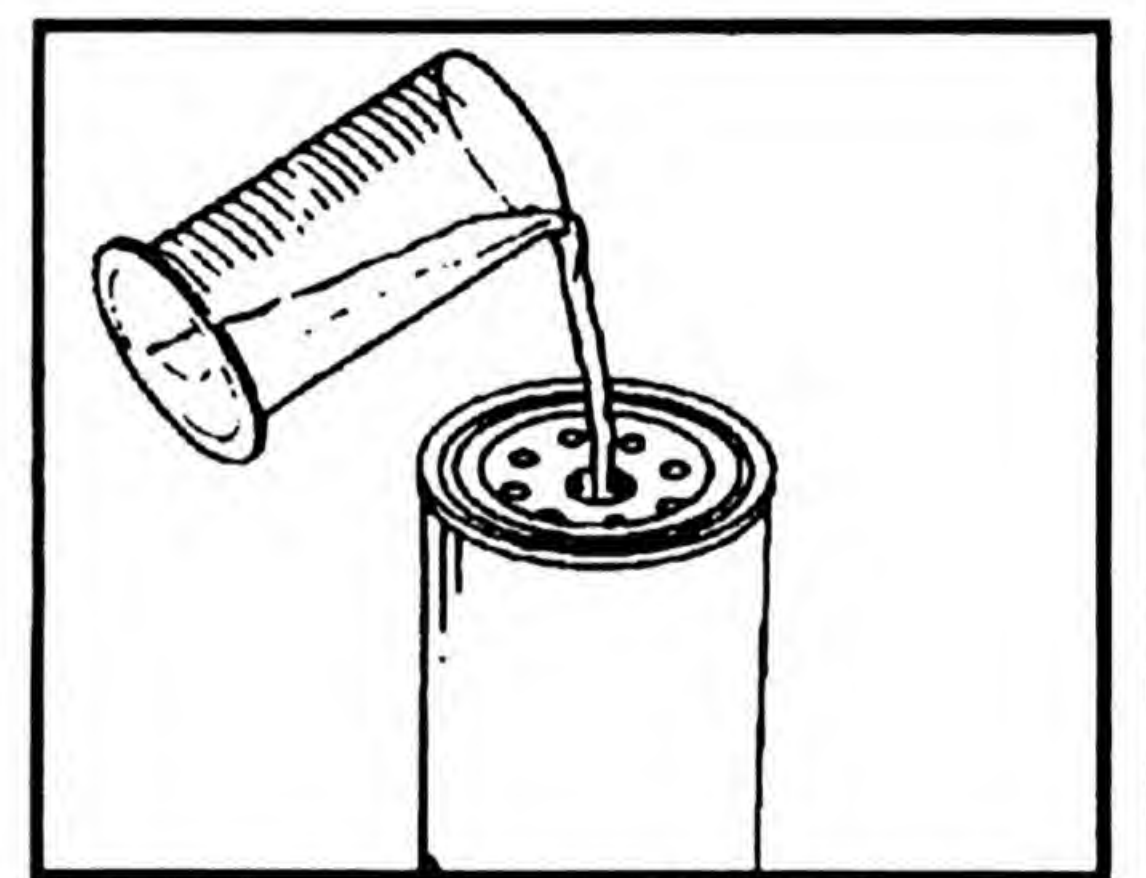
Clean the area around the fuel filter head. Remove the filter. Clean the gasket surface of the filter head. Replace o-ring.



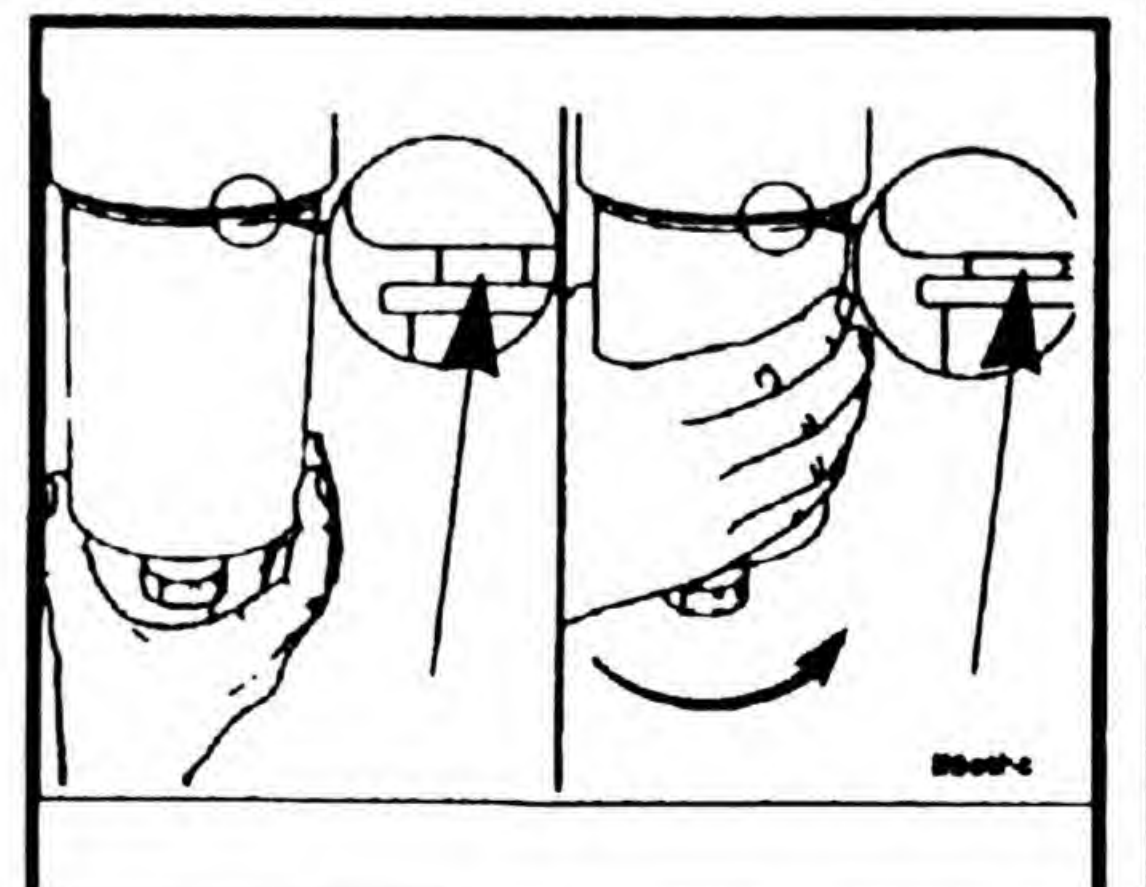
Remove the fuel-water separator drain from old filter and install in new filter with new o-ring. Clean the drain valve before assembling into new filter.



Fill new filter with clean fuel and lubricate the o-ring seal with clean lubricating oil.



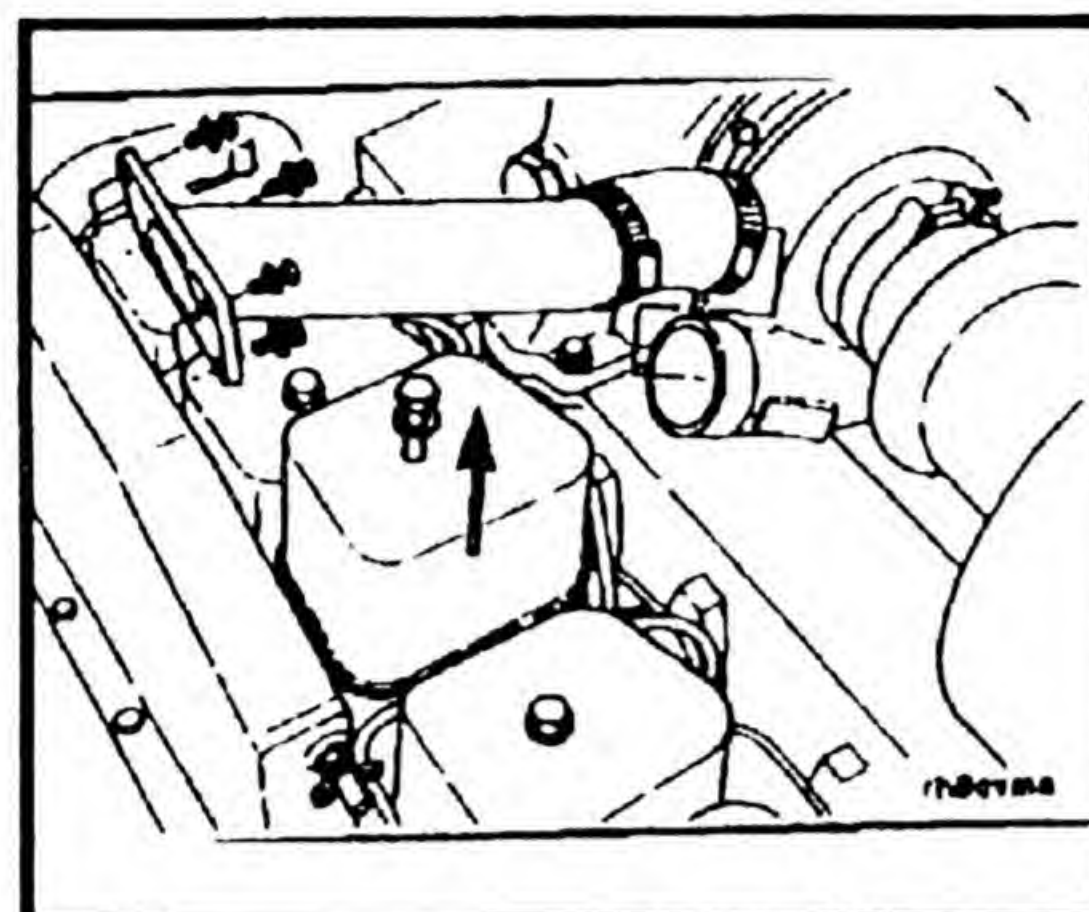
Install the new filter as specified by the filter manufacturer. Mechanical overtightening may distort the threads or damage the filter element seal.



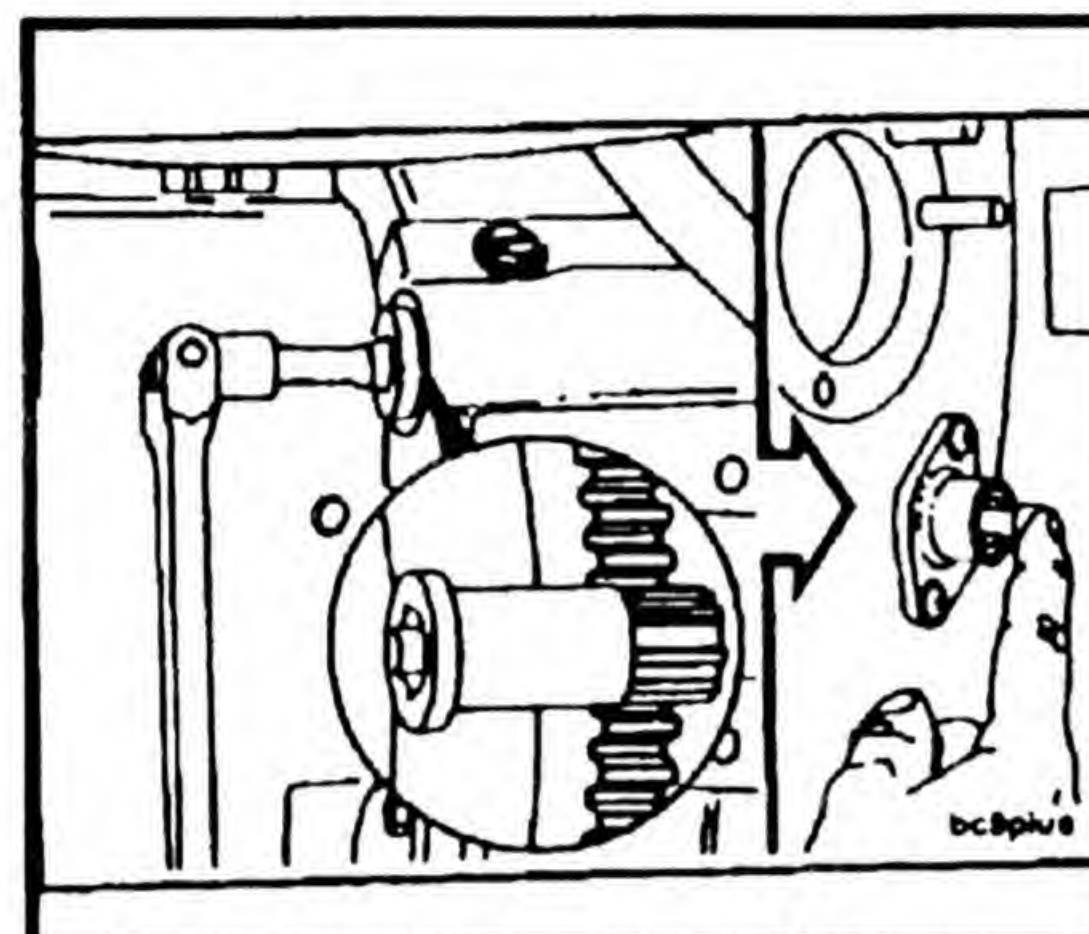


Valve Adjustment-Refer to Operation and Maintenance Manual for valve adjustment mileage intervals.

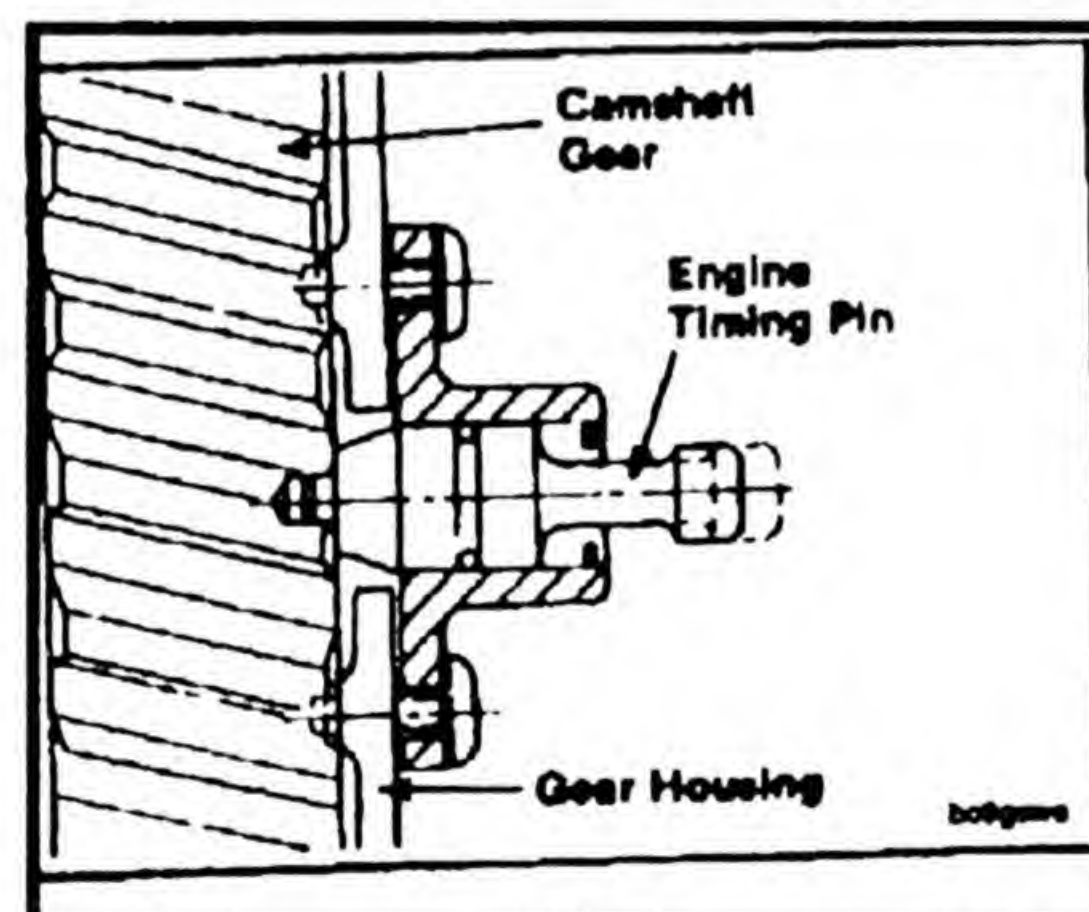
Remove each valve cover.
Use 15 mm wrench



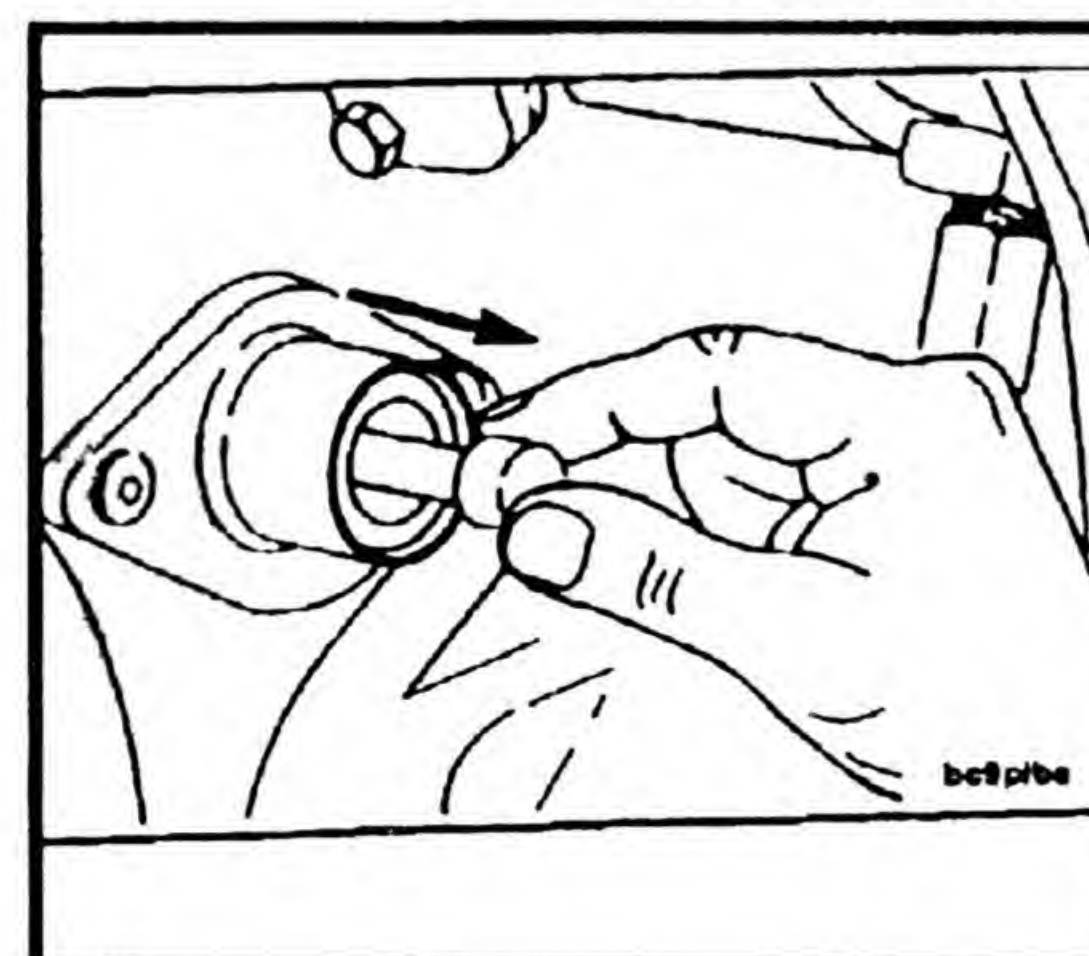
Locate Top Dead Center (TDC) for cylinder number 1 by barring engine slowly while pressing on the engine timing pin.



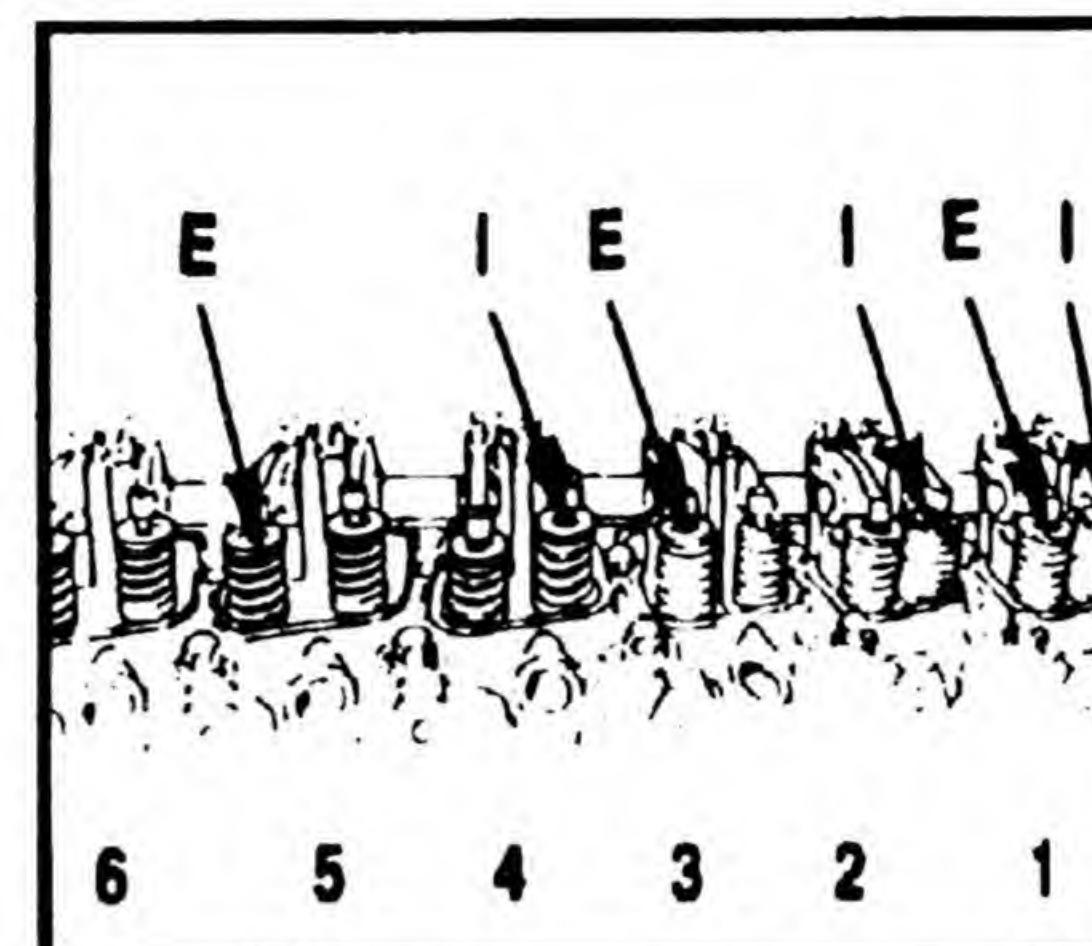
When the pin engages the hole in the camshaft gear, cylinder number 1 is at TDC on the compression stroke.



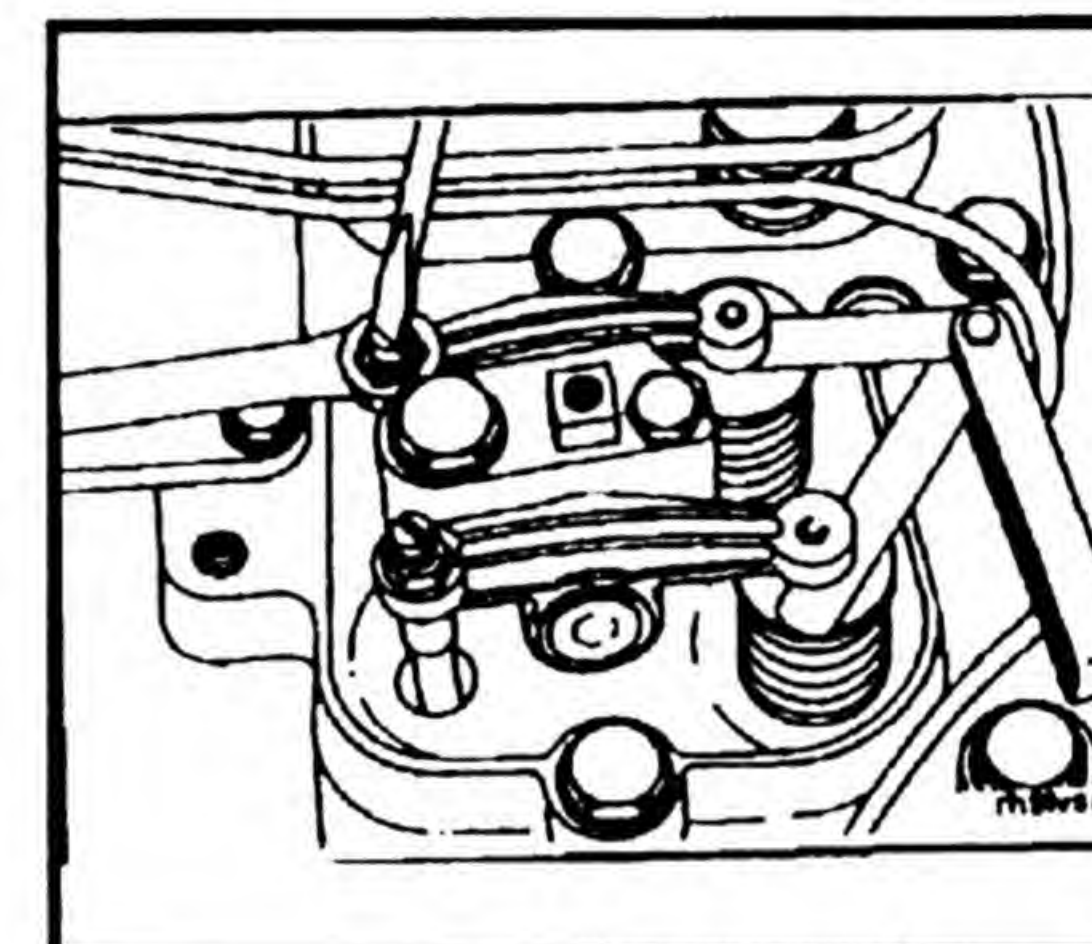
Caution: To prevent damage to the engine or pin, be sure to disengage the pin after locating TDC.



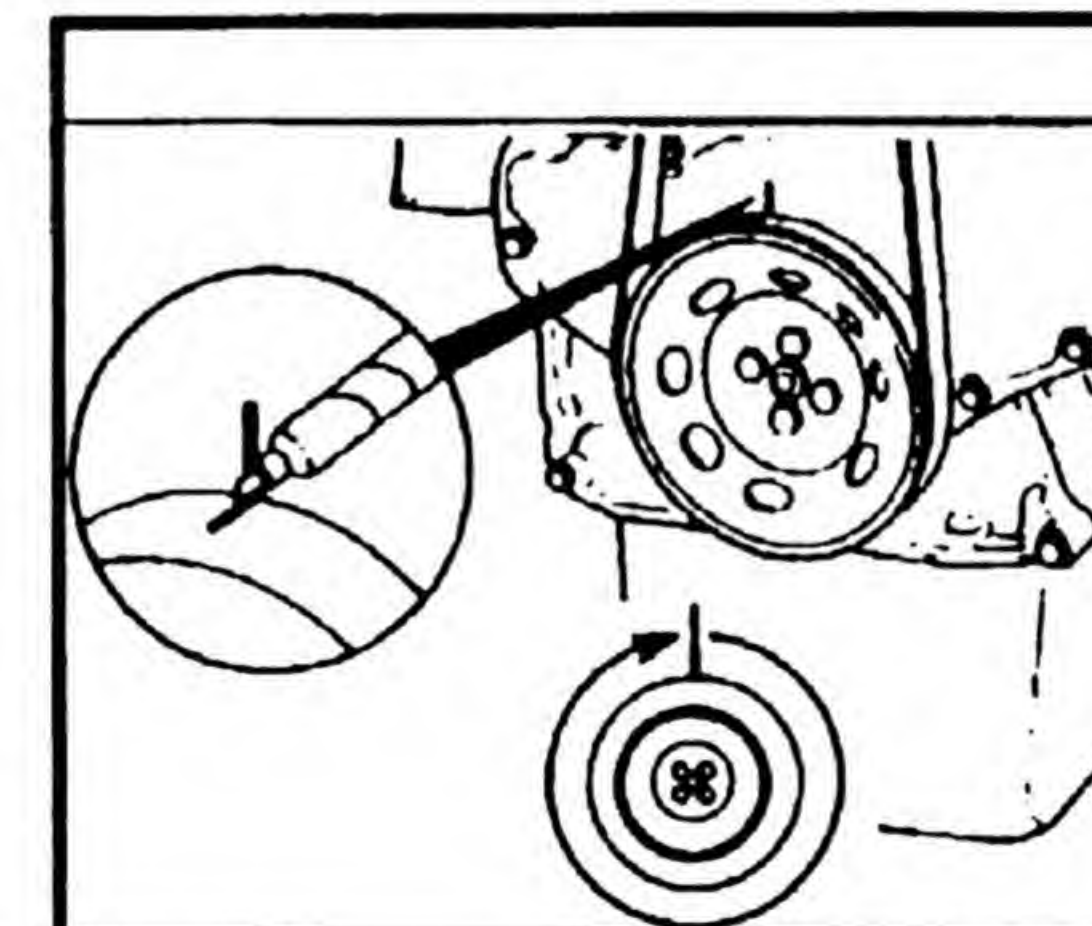
Check/adjust the valves as indicated in the illustration. (I=Intake; E= Exhaust). Tighten locknut and measure valve lash again.



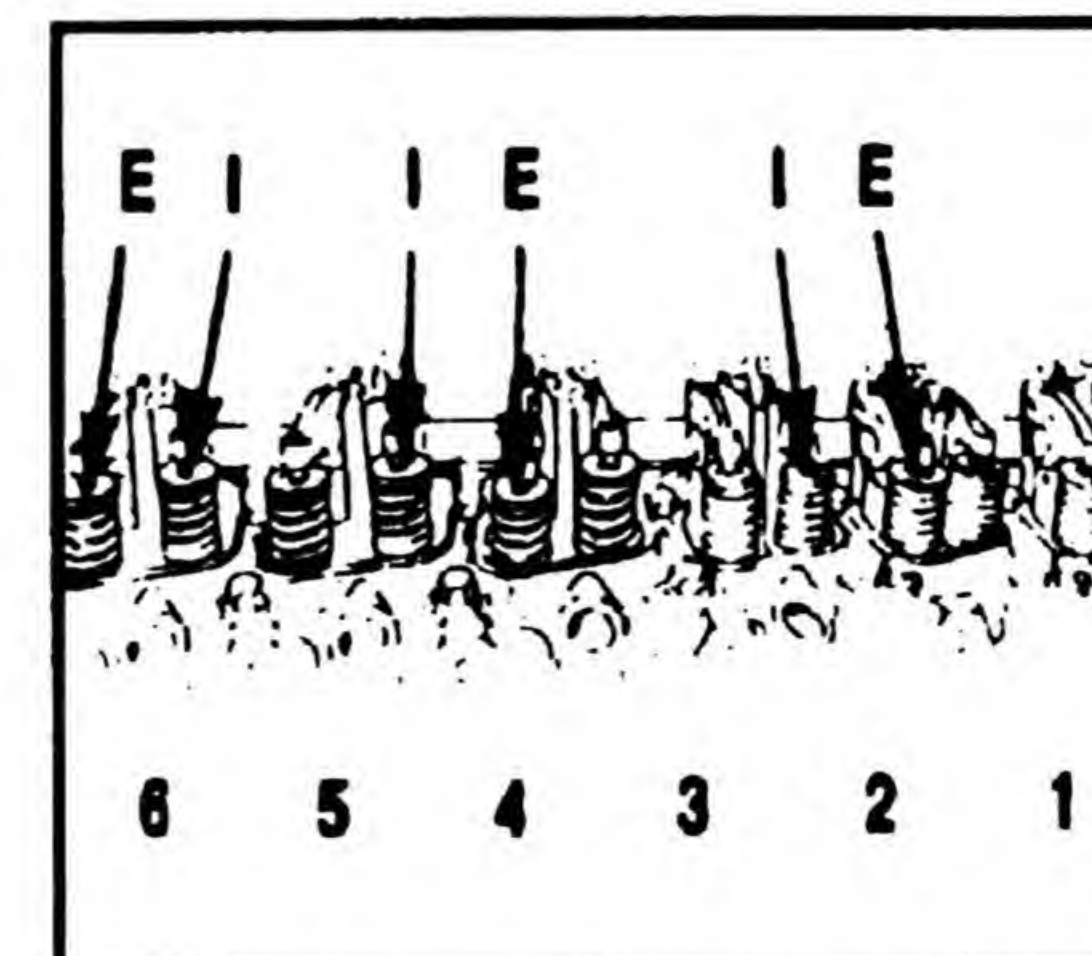
Adjust Intake Clearance:
0.254 mm (0.010 in.)
Exhaust Clearance:
0.508 mm (0.020 in.)
Check/set valves with engine cold [below 60° C 140° F.]



Mark pulley/vibration damper and rotate crankshaft 360 degrees.
Caution: To prevent engine or pin damage, be sure timing pin is disengaged.



Adjust the valves as indicated in illustration. Tighten the locknut and measure the valve lash again. Torque locknut.



When adjustment is completed, install the valve covers and tighten cap-screws to specifications listed in manual.

